



caption caption caption

When digital meets artistry

Using the Aesthetic Press Vanilla Wax in a multi-quadrant case.

by Jörg Müller

For dental technicians, the move to all digital has not always been very easy. The skill to work with a model, with wax or porcelain, or any number of manual skills that were earned over a long period of time are certainly than planning and designing at a computer screen. Trying to see and work in three dimensions even though there are only two dimensions on a screen can be a challenge.

PLANNING DEPARTMENT

A thoroughly planned case always starts with a wax up. Comprehensive cases such as multiple quadrants or a full mouth reconstruction need

precise planning. But we don't even have to go that far. Any anterior restoration with more than two units at least should be waxed up in order to find the right length and position of the teeth. This wax up should be translated into a temporary for the patient to review and get comfortable with the new esthetic smile designed by the team effort of the technician and dentist.

We can achieve this workflow either manually or digitally. However, not every software library produces teeth in a "nature"-like design. Oftentimes, the milled units coming out of the milling machine need some touch-ups. Either

it is the marginal area that might need some attention, using a coping for casting metal, or using a full contoured crown for press a porcelain crown. Next to the marginal areas, details like occlusal anatomy or functional element might need some reshaping.

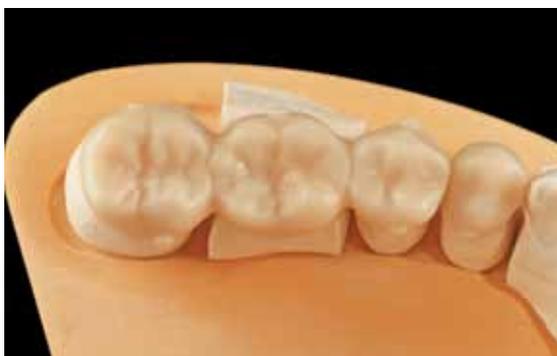
A MULTI-PURPOSE WAX

Most wax blanks have a higher content of resin filled particles, which means the "wax puck" will be very rigid and harder to make any adjustments, not to mention a sealed margin. A crown, which is milled out of a material that handles like conventional carving is ideal to modify.

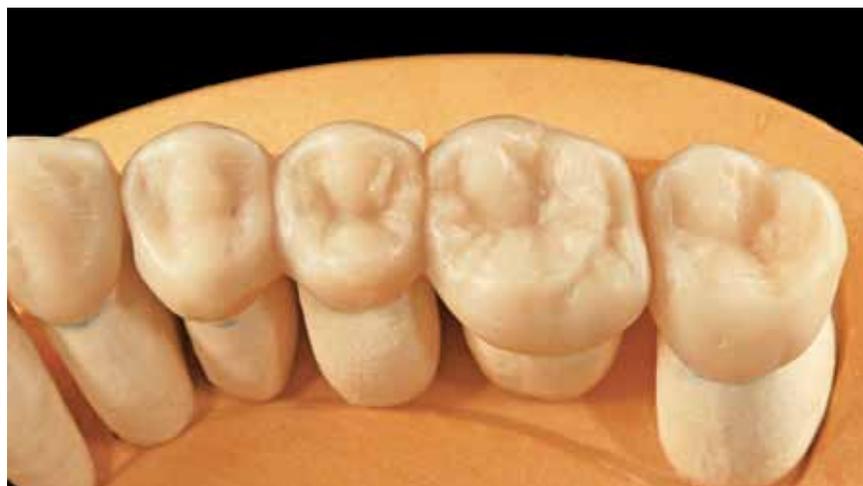
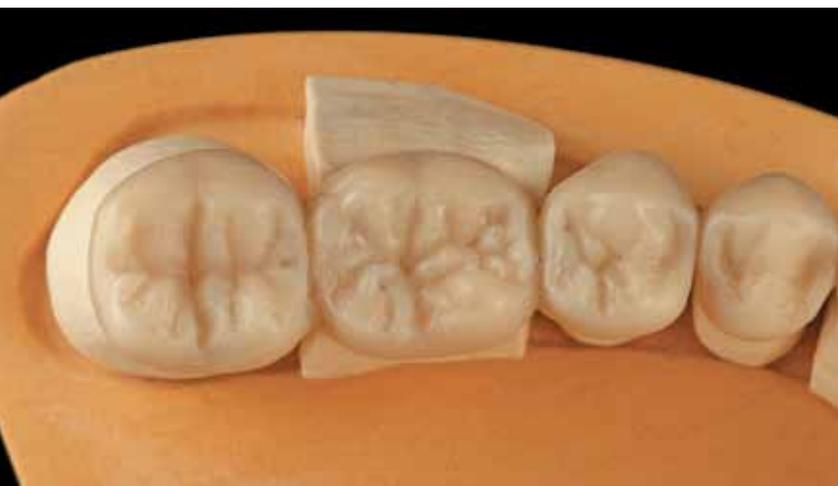
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Fig. 1 Aesthetic Press Vanilla wax blank with the milled units. The blank is available in different sizes as 14,16,18,20 ,25, and 30 mm



Figs. 2 and 3 The milled units can be transferred very easily onto the coping of the model. With the use of the hairdryer, the flexibility can be increased. A carving wax made out of the same material is available to make adjustments.



Figs. 4 and 5 Adjustments to get the right functional elements and a stable occlusion can be precisely waxed.



Figs. 6 and 7 The finished crowns show a perfect surface and homogenous texture. One stain cycle will provide the desired result saving precious time due to the Feldspathic porcelain.

Aesthetic Press Vanilla Wax is specially designed to serve multiple purposes. One can use it as wax flakes for a wax injector, as regular carving wax and also as a wax blank for most CAD/CAM systems on the market. This level of multitasking in a wax is unique in the industry.

Another aspect which is pleasant for every technician—besides the vanilla scent, of course!—the color of the wax is easy on the eyes and as a technician I can finally “see the anatomy.” This wax is even able to be used for an esthetic try in, or for functional control movement for posterior restorations.

PRACTICAL CASE

1. After scanning and designing the multi quadrant case

digitally, the case is milled out of the 98mm AP Vanilla wax blank.

2. The anatomy is fine; however, certain details are missing. These details are not always easy to design at a computer screen and the given tools of the current software available. With the help of an appropriate carving instrument—e.g. the PTC Wax Carver No. 1—the anatomy can be refined to its desired functional design.

3. Certain functional elements are more easily checked and designed in a physical articulator. The split file technique is today’s frequently used workflow to effectively and precisely plan and fabricate a porcelain restoration.

4. The right framework design is essential for the durability of any restoration. Designing the full contour crown and being able to reduce the design by approximately 0.8 mm serves enough space for a nice esthetic result but also for a stable occlusion, minimizing the risk of chipping.

PRESS TO ZIRCONIA

5. After pressing the units with the AP Zircon for Staining ingots, very little refinements are necessary.

6. The feldspathic porcelain allows easy repair or adjustment if necessary. The main advantage here is that the glaze cycle is done without the use of a glaze paste. The self-glazing properties save most technicians a lot of time to stain the right shades to the porcelain crowns.

CONCLUSION

In my experience, combining the best of both worlds is a perfect connection of the dots. Being able to manually modify a CAD/CAM supported restoration with a material that enables the properties a technician is used to maintains the joy and fun factor at work. A seamless integration of material and workflow is the most important guarantee and success for each case, but also maintains the happiness of each technician! **lab**